



## VII. 510(k) Summary

In accordance with Title 21 of the Code of Federal Regulations, Part 807, and in particular §807.92, the following summary of information is provided:

# A. Submitted by:

Laetitia Cousin

SEP - 1 2006

Director of Regulatory Affairs and Quality Assurance

NuVasive, Incorporated 4545 Towne Centre Court San Diego, California 92121 Telephone: (858) 909-1868

## B. Device Name

Trade or Proprietary Name:

NuVasive SpheRx II System

Common or Usual Name:

Pedicle Screw System

Classification Name:

Fax: (858) 909-2068

Spinal Pedicle Screw Spinal System, Spinal Interlaminal

Fixation Orthosis, Spinal Intervertebral Body Fixation

orthosis.

Device Class:

Class III

Classification:

§888.3050, §888.3060, §888.3070

Product Code:

KWP, MNI, MNH, KWQ

#### C. Predicate Devices

The subject *SpheRx II System* is substantially equivalent to the *SpheRx System* currently distributed commercially in the U.S. by NuVasive.

### D. Device Description

The NuVasive SpheRx II System consists of a variety of polyaxial screws, fixed angle screws, rods, hooks, locking nuts, and transverse connectors. Implant components can be rigidly locked into a variety of different configurations to suit the individual pathology and anatomical conditions of the patient.



#### E. Intended Use

When used as a pedicle screw fixation system, the NuVasive SpheRx Spinal System is intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the treatment of the following acute and chronic instabilities or deformities of the posterior thoracic, lumbar, and sacral spine:

- 1. Degenerative disc disease (as defined by back pain of discogenic origin with degeneration of the disc confirmed by patient history and radiographic studies)
- 2. Degenerative spondylolisthesis with objective evidence of neurologic impairment
- 3. Fracture
- 4. Dislocation
- 5. Scoliosis
- 6. Kyphosis
- 7. Spinal tumor and/or
- 8. Failed previous fusion (pseudoarthrosis)

The NuVasive SpheRx Spinal System is also indicated for the treatment of severe spondylolisthesis (Grades 3 and 4) of the L5-S1 vertebral joint in skeletally mature patients receiving fusion by autogenous bone graft, having the device fixed or attached to the lumbar and sacral spine (L3 to sacrum), with removal of the implants after attainment of a solid fusion.

When used as an anterolateral non-pedicle screw system in the thoracic and lumbar spine, the NuVasive SpheRx Spinal System is also intended for the following indications:

- 1. Degenerative disc disease (as defined by back pain of discogenic origin with degeneration of the disc confirmed by patient history and radiographic studies)
- 2. Spinal stenosis
- 3. Spondylolisthesis
- 4. Spinal deformities
- 5. Fracture
- 6. Pseudoarthosis
- 7. Tumor resection and/or
- 8. Failed previous fusion

#### F. Comparison to Predicate Devices

The subject device has indications for use identical to those of its predicate, and employs the same principles of operation.

## G. Summary of Non-Clinical Tests

Mechanical testing was presented.

# H. Summary of Clinical Tests

(Not Applicable).

#### DEPARTMENT OF HEALTH & HUMAN SERVICES



NuVasive, Inc. % Ms. Laetitia Cousin 7475 Lusk Boulevard San Diego, California 92121

JUL 3 0 2009

Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

Re: K062317

Trade/Device Name: NuVasive SpheRx II System

Regulation Number: 21 CFR 888.3070

Regulation Name: Pedicle screw spinal system

Regulatory Class: III

Product Code: NKB, MNH, MNI, KWP, KWQ

Dated: August 8, 2006 Received: August 9, 2006

Dear Ms. Cousin:

This letter corrects our substantially equivalent letter of September 1, 2006.

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <a href="http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm">http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm</a> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

Mark Melkerson

Director

Division of Surgical, Orthopedic, and Restorative Devices Office of Device Evaluation Center for Devices and Radiological Health

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**Enclosure** 

# Indications for Use

510(k) Number (if known):K062317
510(k) Number (ii known)
Device Name: SpheRx® II System
Indications For Use:
<ul> <li>When used as a pedicle screw fixation system, the NuVasive SpheRx Spinal System is intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the treatment of the following acute and chronic instabilities or deformities of the posterior thoracic, lumbar, and sacral spine:</li> <li>Degenerative disc disease (as defined by back pain of discogenic origin with degeneration of the disc confirmed by patient history and radiographic studies)</li> <li>Degenerative spondylolisthesis with objective evidence of neurologic impairment</li> <li>Fracture</li> <li>Dislocation</li> <li>Scoliosis</li> <li>Kyphosis</li> <li>Spinal tumor and/or</li> <li>Failed previous fusion (pseudoarthrosis)</li> </ul>
The NuVasive SpheRx Spinal System is also indicated for the treatment of severe spondylolisthesis (Grades 3 and 4) of the L5-S1 vertebral joint in skeletally mature patients receiving fusion by autogenous bone graft, having the device fixed or attached to the lumbar and sacral spine (L3 to sacrum), with removal of the implants after attainment of a solid fusion.
<ul> <li>When used as an anterolateral non-pedicle screw system in the thoracic and lumbar spine, the NuVasive SpheRx Spinal System is also intended for the following indications:</li> <li>Degenerative disc disease (as defined by back pain of discogenic origin with degeneration of the disc confirmed by patient history and radiographic studies)</li> <li>Spinal stenosis</li> <li>Spondylolisthesis</li> <li>Spinal deformities</li> <li>Fracture</li> <li>Pseudoarthosis</li> <li>Tumor resection and/or</li> <li>Failed previous fusion</li> </ul>
Prescription Use X AND/OR Over-The-Counter Use (Part 21 CFR 801 Subpart D) (21 CFR 807 Subpart C)  (PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)
Districtive of April 1, Office of Bovice Evaluation (ODE)

Division of General, Restorative, and Neurological Devices

Page 1 of 1

510/6) Number KN1-217